



EBOLA HEMORRHAGIC FEVER

Ebola hemorrhagic fever (Ebola HF) is a severe, often-fatal disease in humans and nonhuman primates (monkeys and chimpanzees) that has appeared sporadically since its initial recognition in 1976.

The disease is caused by infection with Ebola virus, which was first discovered in Africa. The virus is not known to be native to other continents, such as North America.

Confirmed cases of Ebola hemorrhagic fever have been reported in Africa and in a laboratory worker in England. No case of the disease in humans has ever been reported in the United States.

Humans can spread the virus in several ways. People can be exposed to Ebola virus from direct contact with the blood and/or secretions of an infected person. This is why the virus has often been spread through the families and friends of infected persons: in the course of feeding, holding or otherwise caring for them, family members and friends would come into close contact with such secretions. People also can be exposed to Ebola virus through contact with objects such as needles that have been contaminated with infected secretions.

Ebola-Reston that appeared in a research facility in Virginia may have been transmitted from monkey to monkey through the air in the facility. While all Ebola virus species have displayed the ability to be spread through airborne particles (aerosols) under research conditions, this type of spread has not been documented among humans in a real-world setting, such as a hospital or household.

The signs and symptoms of Ebola HF are not the same for all patients. The table below outlines symptoms of the disease, according to the frequency with which they have been reported in known cases.

Time Frame	Symptoms that occur in most Ebola patients	Symptoms that occur in some Ebola patients
Within a few days of becoming infected with the virus:	high fever, headache, muscle aches, stomach pain, fatigue, diarrhea	sore throat, hiccups, rash, red and itchy eyes, vomiting blood, bloody diarrhea
Within one week of becoming infected with the virus:	chest pain, shock and death	blindness, bleeding

Researchers do not understand why some people are able to recover from Ebola HF and others are not. However, it is known that patients who die usually have not developed a significant immune response to the virus at the time of death.

There is no standard treatment for Ebola HF. Currently, patients receive supportive therapy. This consists of balancing the patient's fluids and electrolytes, maintaining their oxygen status and blood pressure, and treating them for any complicating infections.

Transmission in health care settings has been associated frequently with Ebola HF outbreaks in Africa. If cases of the disease do appear, care must be taken to avoid the spread of the disease within health-care facilities. Patients must be isolated from contact with any unprotected people and hospital workers must wear protective clothing, such as masks, gloves, gowns, and goggles. The aim of these techniques is to avoid any person's contact with the blood or secretions of any patient. If a patient with Ebola HF dies, it is equally important that direct contact with the body be prevented.

For more information, call the North Dakota Department of Health at 701.328.2378.